

HOW TO KEEP WELL

A SIMPLE OUTLINE OF THE PROVED
LAWS OF HEALTH

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PREFACE

AS a medical woman "family doctor," I am happy to use my pen in the furtherance of good health for the individual and the nation. A state cannot be itself sound if its personal units are unsound, and individuals can best contribute to national health by learning the laws of health, putting them into personal practice, and disseminating the knowledge they have acquired.

It is possible to accomplish good work and live happily if one has indifferent health, but it is immensely easier to accomplish both these aims if one is not disturbed by the complaining tissues of an imperfectly working body machine.

Moreover, "prevention is better than cure," and many a serious disorder would have been averted had the affected individual kept himself in sound working health. Preventive medicine has made great strides in the last hundred years, and we hope to see it attain still further triumphs. This aim will be rendered infinitely more effective if human beings determine to add their quota personally by attaining to, and constantly preserving, a healthy body and a sound mind.

M. C.

CHAPTER I

CARRY YOUR BODY CORRECTLY

THE importance of a correct body posture cannot be overestimated. It should be practised from childhood upwards. There are three main reasons for this :

First. The human body works according to a law of balance by which it seeks to keep itself in an effortless comfortable posture in whatever attitude we are placed at any one time. In standing we should not slouch to one side, or partially twist the pelvis, in sitting we should be comfortably balanced on our buttocks without undue pressure anywhere, and in walking we should not waddle, roll, or slouch along, with head poked forward and buttocks stuck out.

Second. Large muscles and fibrous tissues extend round the body from the spine, and when this is held upright, these fibres project at certain levels to form supporting shelves or basins for the large body organs in the chest, abdomen and pelvis. The organs are attached to the inside of the backbone and back muscles by strong ligaments and are intended to be kept in place by the firm contraction of the muscles forming the abdominal wall in front of the body.

When the spine is held incorrectly, the organs are dislodged from their appropriate levels, drop to positions not adapted to them and become crowded together. As a natural consequence, function is interfered with, the nervous tone of the tissues becomes impaired, constipation with toxic absorption inevitably follow, and much chronic

ill health is the sequel, as well as impairment of personal appearance.

✓ *Third.* Poor posture and consequent crowding together of viscera interfere as well with circulation, respiration and food assimilation. As a consequence the individual feels unwell, weary, effortless and depressed and may eventually become a nervous invalid (neurasthenic).

Experiment with yourself, and you will notice the feelings of depression which accompany a slack posture, and the opposite condition of joyous well-being when the spine is held erect, the head well poised, the feet placed correctly and the abdominal muscles firmly contracted.

Not every person has a perfect body, but every person can hold the body he has, in the position most nearly approximating to the correct one. Moreover, with knowledge, he can prevent defects of posture and balance arising, and can correct unhealthy habits which may have been already formed.

It is far easier to adopt and maintain good postural technique than it is to cure, or be cured of, the neurasthenia and abdominal discomfort which is the consequence of a static intestine and a compressed solar nerve plexus.

Other conditions of ill-health caused, or aggravated, by incorrect posture are chronic bronchitis, an increased liability to tuberculosis, moveable kidney, flat feet, chronic backache, muscular and joint rheumatism, and near sight.

We should try to acquire a correct body posture for whatever we are doing, and should try to form a "posture" habit, so that if we find ourselves developing wrong carriage, we immediately correct it. To develop and maintain easily and as a habit, a correct posture, is to progress far more towards health than to perform

muscular exercises at a set time every day and then forget all about how to hold oneself.

It is obvious, therefore, that correct physical education of one's body framework is a mental as well as a physical process, hence we must know *what* good posture is, *why* it matters, and how we are to acquire and maintain it. The second of these points has already been dealt with, and we will now briefly discuss the first and third.

The essentials of healthy posture are body balance and abdominal muscle tone—the latter being the firm contraction of the abdominal wall until it almost appears to touch the spine. To obtain *balance*, one should walk quietly with a book placed upon the head, the abdomen contracted and the buttocks held in, breathing steadily, in and out, all the time. Whatever position we are occupying, sitting, lying, or upright, we should always be conscious of a firm indrawing of the abdominal wall.

It will be a help to bear in mind the correct positions for various body attitudes.

1. *Lying*. Lie with the back as flat as possible and preferably on a firm mattress. Place the hands to the sides, palms downwards, legs straight out. Hold the abdomen well in and breathe quietly. Relax mentally, close the eyes and slacken any muscle felt to be taut (it should become a habit to hold the abdominal muscles in without any feeling of tension).

2. *Standing*. Feeling conscious of the body weight falling on the balls of the feet, not on the heels. Then stand upright, not leaning to one or other side, and feel that if there was a wall behind one, there would be the sensation of head, shoulders, buttocks and calves touching the wall.

3. *Sitting*. Sit with the trunk straight and not curved forward, backward, or to one side. Feel conscious of the

weight of the body on the large bones underneath the bend of the buttocks, rather than on the thighs. Hold the head erect, with chin in, the chest elevated and the abdominal wall firm.

4. *Walking.* Walk with the feet parallel and pointed forward. Take small regular steps, move the arm on the same side backward as the leg moves forward; hold the abdomen well in, control the buttocks, elevate the head with chin well in. Smile to avoid any tenseness of the facial and neck muscles, which are the cause of much fatigue.

CHAPTER II

BREATHE PROPERLY

IT is a fundamental axiom of health that one cannot be healthy if one fails to use the breathing apparatus correctly. The lungs, the human bellows, were given to us for a purpose, and that purpose was to expel poisonous waste gases from the body and draw in clean, pure, oxygen-laden air.

To breath properly is a direct corollary of holding oneself properly, since respiration can only be fully accomplished if the chest, neck and shoulders are correctly and easily held, and the abdominal muscles kept well contracted.

We breathe by means of two bellows-like organs, the lungs, which enable the body cells to be supplied with oxygen. Through them the blood is purified and cleansed of poisons picked up by the blood's progress through the body. To effect this gaseous exchange we have to *inspire* to draw air into the lungs, and *expire* to drive it out again about sixteen times per minute.

This double movement is effected by the expansion and contraction of the chest walls, aided by the upward and downward movement of the diaphragm (large muscle lying between the chest and the abdominal cavity) so that we breathe by the combined action of our ribs and our diaphragm, causing the lungs to expand and contract.

When we inspire, air is drawn into the lungs, after which there is a pause, and then the ribs contract upon the lungs (expiration) and force air out. The average healthy

person should have a chest expansion of about three inches.

It is instructive to know the factors which effect respiration. The main ones are as follows:

Age. The young child breathes more rapidly than the adult (nearly three times as fast) and therefore is more adversely affected by conditions which normally increase the rapidity of respiration (emotion, lack of fresh air, over-strenuous exercise, and inflammation of air tubes).

Fatigue. Excessive weariness results in a greater concentration of poisonous carbonic acid gas in the blood, and this stimulates the respiratory centres in the brain and leads to over-quick and shallow respiration, so that more carbonic acid is again left in the lungs from imperfect elimination.

Incorrect Posture. A crookedly held spine and sagging shoulders mean an undeveloped chest, flattened lungs and the use of only the upper portion of the lungs—"shoulder breathing"—which is not only incorrect, but actually harmful. When the shoulders are rounded, the lungs, unable to push the ribs forward, remain almost entirely deflated and so do not get rid of the poisonous gases passing in from the circulation. The starting place for tuberculosis is in the spaces at each side of the neck, above the collar bone, so that it is important to include this point of the lungs in the act of respiration.

To breathe correctly, and expand the chest fully, stand in the fresh air or near an open window, place the hands on the lower parts of the ribs on each side, *relax the shoulders* until they feel almost detached from the body, and then keeping shoulders and breast bone down, expand the chest so that it feels filled from side to side. Keep the mouth closed during inspiration, and open it a little during slow expiration.

BREATHE PROPERLY

Obstruction to the Air Way. Nasal catarrh, adenoids, deflected nasal septum and enlarged tonsils tend to impair breathing and should be given attention. (Restriction of starchy food is often very efficacious in removing catarrhal conditions)

Emotion. Any emotional disturbance, such as fear, shyness, anxiety, anger, interferes with respiration by causing tension of the rib and shoulder muscles so that the chest is held as in a vice, moving only at the level of the collar-bone. This is seen most typically in asthma, which is largely an emotional state.

Over-eating and Digestive Disturbances. These interfere with respiration by distending the stomach and so blocking the movement of the diaphragm. They produce constipation which again distends the intestine and causes the body to retain more carbon dioxide. They also facilitate the formation of nasal catarrh.

Advantages of Correct Breathing

- ✓1. Cleanses the body and brings in purified air.
- ✓2. Adds beauty to the complexion by feeding the tissues with health-giving oxygen.
- ✓3. Gives depth and volume to the voice and therefore adds charm to the personality.
- ✓4. Gives psychological self-confidence by promoting poise, relaxation of tense muscles and quietness of movement.

CHAPTER III

EAT AND DRINK WISELY

IN this chapter we will consider the needs of the body in respect to (a) food, (b) beverages, and how we are to eat and drink along hygienic lines.

Food is necessary for life: it enables the body to grow, gives it energy to move and work, feeds its tissues to effect body processes, and supplies new cells in place of those worn away or exhausted.

But food is not only necessary, it must be correct in composition and in amount, if the digestive system is to deal adequately with it.

Science has long studied the composition of an adequate dietary, and has discovered that the body needs for its use certain food groups. These are: water, carbohydrates, fats, proteins, vitamins and minerals. Certain tissues select more of one food group than another, but all are necessary to create the completely effective diet.

To exclude entirely any one food group means to starve certain tissues of essential nutriment, and conversely, to eat excess of any one group means to put undue strain on the body cells in removing the excess.

That is why food fads are unwise. They usually mean that the diet is unbalanced, and so the body may be starved, even in the presence of abundant food.

The rule for eating should be to eat enough *and no more*. It is that "little bit extra" which often decides the scales to weigh against health. In addition, one should let one's work decide the quantity of food; when we are doing

sedentary work we should eat less than on the days when we are moving about more and making greater use of our muscles.

Also, the people who more readily absorb food materials should eat less at all times than the thin, lean type who seem to throw off most of what they take.

A third rule should be to eat more of simple, wholesome foods, left as nearly as possible in their natural state, rather than to select rich, highly spiced, overcooked or twice-cooked foods, or those preserved by canning, bottling or potting. Not all foods lose their vitamin content in the preserved state, but many do so and therefore are of little or no food value.

It is better, however, to eat fruit and vegetables preserved by canning or bottling than to eat none at all, but, in general, freshly cooked vegetables and raw fruit are to be preferred from the health standpoint.

In general it is desirable to avoid excess of sugar and prepared starch (such as rice and white bread) as these are not readily eliminated by the body. Their retention tends to cause such unhealthy states as catarrh, raised blood pressure, gastric and intestinal ulceration, kidney irritation and chronic constipation.

The psychological value of correct feeding cannot be overstressed, since it often determines whether one shall be too fat or too thin, whether one's eyes, hair and skin shall be full of vitality and attractiveness, and whether one's mental powers shall be fresh. The effects of these factors on the psychological outlook can be seen every day.

It is very easy in modern life to over-eat, over-sleep and under-exercise and the stress and competition in life are so great that one needs to practise every method which may bring good health to the body.

There are a number of common dietetic errors which should be mentioned at this point.

✓1. *Insufficient Drinking of Water.* Water is essential as a solvent for food, so that digestion and elimination may be effected, blood cells carried to different parts of the body, and temperature regulated. It is usually computed that life can only exist for a few days if water is absent, and that even alone water can sustain life for several weeks.

Under normal conditions an adult requires three quarts of water daily, but more may be demanded by the tissue cells if more has been lost by reason of feverishness or exercise. We need to replace the daily amount lost, and to take in a little extra to be a reserve.

It is usually considered that six glasses a day in addition to the water contained in one's food will supply the bodily need for water. Thirst should always be given attention as it is nature's demand for necessary fluid. If thirst is excessive and occurs irrespective of exercise, etc., there is need for medical advice.

2. *Excess of Meat.* Meat is largely muscle, and the using up and elimination of digested meat casts a strain upon the liver and kidneys. If too much meat is taken, nature revenges herself by showing symptoms of acid retention, kidney and liver irritation and raised blood pressure. A safe rule is, meat once a day only, with occasional days of no meat at all.

3. *Excess of Starch and Sugar.* Starch and sugar (that is, carbohydrates) provide fuel for energy, and hence their intake should be dependent upon the amount of active exercise or labour performed by the individual.

Where a person leads a sedentary life, and where he or she has already ample fat which also supplies energy to the body, carbohydrates need to be cut down, although

they must never be entirely excluded. The chief sources for carbohydrates in common use are wheat, rice, potatoes, flour, and sugar. The last item especially is used in excess and can safely be cut down to the minimum in the diet of nearly every one. Potatoes and bread ought not to be eaten at the same meal as both are starchy foods. The frequent custom of eating fried potatoes (chips, scallops) with bread and butter, is inadvisable, for the same reason.

It is believed that much of the increase in diabetes and intestinal inflammation is due to the over-use of sugar.

4. *Deficiency of Vitamins and Minerals.* Vitamins are crystalline substances whose nature is, as yet, imperfectly understood. But we do know that they are essential to the development of healthy nutrition.

They are found in natural, uncooked foods such as fruit, cod liver oil, liver, egg yolk, lemon juice, carrots, tomatoes and green leafy vegetables. They are frequently destroyed by cooking and preserving. Readers are referred to some of the many popular manuals describing vitamins, as space here does not permit of a detailed account. Suffice it to say that some kind of fruit, or some raw or steamed vegetable should form part of all daily diets.

The mineral salts needed by the body are calcium, phosphorus, sodium, iron, iodine, sulphur, potassium, chlorine, copper, manganese. They are necessary for the healthy development of bones, teeth and nerve sheaths. They are present in milk, cheese, fish, beans, eggs, peas, cauliflower, spinach, celery, apples, prunes and meat. If these foods are taken regularly in small quantities, the body is assured of its mineral content.

No account of dietary is adequate without mention of slimming. A slimming diet is not given here, for satisfactory

ones are generally known and accepted, but there are certain points which need to be stressed:

1. Girls who are not mature should never "slim" unless directly ordered by the doctor.
2. An unbalanced diet is a *starving* diet, and does more harm than good. The diet should contain a little of all the food groups, but white flour, cakes, cereals, and excess of butter and sugar should be avoided.
3. The body should be given *sufficient* food, especially if the individual leads an active life (but the fats and starches should be reduced as mentioned above).

Water has already been discussed, so it remains to deal with the position of milk, tea, coffee, cocoa and alcohol in the day's diet.

Milk is an almost perfect drink for children because it contains all the body-building constituents, and is also good for most adults by reason of its high mineral content. Two glasses of warm milk sipped slowly are far better than a meal if one is fatigued, for they do not tax the digestion. One of the admirable movements of the present age is the "milk bar" habit, which ensures people consuming much of so healthy a beverage. The war cut down the number of milk bars, but as things get better their numbers will increase, for many more people have learnt to appreciate milk and milk drinks. There are, however, certain young children who cannot tolerate excess of milk, and if they are given extra supplies at school, manifest signs of liver intolerance to fats by jaundice and vomiting.

Tea and coffee are both stimulants to the nervous system. Coffee stimulates kidney activity considerably. Excess of tea or coffee, especially if made strong, tends

to cause flatulence, headache and palpitation. Tea, freshly made, and taken with lemon and no milk is undoubtedly a refreshing drink valuable in cases of fatigue. It is a pity that so few people appreciate its charm, preferring their tea to be black and strong.

Cocoa is a soothing drink, not causing any irritative action on the body cells. But it has little food value if taken without milk and sugar.

It is difficult to discuss the virtues and vices of alcohol in the limited space of this chapter, but it is safe to say that few beverages have given rise to so much antagonism between rival opinions. It is, however, equally true to say that no beverage more strictly requires *disciplined* use than does alcohol, in any form, since its effects on the body are so potent and become so quickly out of control.

Alcohol is not essential to life, is poisonous to living cells, and quickly interferes with the mental qualities of control, judgment and decision. It also produces a temporary sense of well-being and self-confidence, so that it becomes increasingly attractive to the user. It increases the pulse rate, and warms the skin surface by dilating the small blood vessels. In larger doses it depresses the heart and leads to the deposition of fat in the heart muscle.

Hence, alcohol should not be taken by the person who is weak of will or purpose, and should never be taken by the adolescent. If, however, it can be used with discretion alcohol has certain attractive social virtues; it stimulates appetite and gives an impetus to conversation. There is, however, one unfailing rule to observe. Never take any form of alcohol on an empty stomach.

CHAPTER IV

KEEP YOUR SYSTEM CLEAN

IN the daily processes of chemical exchange throughout the body, certain waste substances are left over for excretion, and if the body is to keep healthy its excretory channels must be kept constantly effective and unobstructed.

These channels or drains are the lungs, kidneys, skin and intestines—and of these the last one is the most important as having the largest amount of work to do.

The lungs give off carbon dioxide gas which is one of the deleterious substances produced in the body; the mechanism of this has already been referred to in a previous chapter.

The kidneys extract waste matter from the blood vessels passing through the kidney substance, dissolve this waste matter in water, and pass the dissolved substance out in the form of urine, through the bladder to the exterior of the body.

To keep this mechanism working effectively it is necessary to flush the kidney cells constantly, which is one of the reasons why water should be consumed freely. Over-concentration of the urine means damage to the kidney substance (nephritis) with retention of the poisons in the body, and often the formation of kidney stones.

Skin

The skin has several functions (touch, protection, regulation of body warmth, and excretion) and of these,

the chief one is the removal of waste matter from the body by means of the pores. There are thousands of these tiny openings in every square inch of skin and they are able to open and close automatically. Waste matter is excreted as sweat and this is constantly, often invisibly, being given off through the pores.

Visible perspiration appears on the skin when more fluid is being given out, as during exercise, raised temperature and fear. If the skin is to perform its functions regularly and well, it must be kept clean so that the tiny openings of the pores are free to pass out the waste matter.

This means that the skin all over the body should be washed daily with a soapy lather, brisk friction being applied. It is important to rinse the skin afterwards with clear cold water in order to remove any traces of soap.

The hair should be washed regularly, as the scalp secretes just as the skin does all over the rest of the body. Failure to keep the hair clean may result in scurfiness and eczema.

The shorter the hair the oftener it should be washed as the scalp secretes the same amount of oil whether there is long hair or short and if short hair is left unwashed the oil is left to block up the pores in the scalp.

Women who use cosmetics should be particular to cleanse the skin and remove all make-up before applying any more. They should only use the best possible creams, powders and lipstick, as the skin is easily irritated and rendered unhealthy. An occasional face massage is a tonic to the skin and effectively removes much debris which has sunk into the skin and may be blocking the pores. The powder-puff should be kept in a state of cleanliness.

The Intestines

When food has been acted upon by the various juices in the stomach and small intestine, any residue passes into the large bowel (colon) where it is further broken down into a form which enables it to pass into the end of the bowel (rectum), whence it is expelled from the body. This "emptying of the bowels" should occur once or twice daily, at approximately the same time and without pain or effort.

If the residue is held up from any cause, it gradually accumulates in the colon, distending and displacing it. As food is constantly being taken into the body, the stomach, duodenum and small intestine keep trying to force their contents forward against the retained mass in the colon.

Unless there is evacuation, the mucous lining of these parts becomes engorged with blood and tends to form ulcers which are painful and may perforate. The stomach becomes distended and displaced, crowding together the parts of the intestine below. This is the mechanical result of constipation, but in addition, the poisonous bacteria accumulating in the decomposing fæces enter the liver and other body organs, where they produce symptoms of chronic ill-health.

We do not really know how many bodily diseases are actually due to constipation, but scientific opinion inclines to the belief that more and more of these arise from intestinal poisoning.

Causes of Constipation

Because of this, it is valuable to know what the normal cause of constipation are:

1. Interfering with the development of a natural bowel rhythm by giving a child aperient drugs early in life. Every nursery should bear the words: No opening medicine for babies: Cultivate a natural habit.

2. Continual neglect of a call to evacuate the bowel, and irregularity of evacuation.

3. Lack of tone in the abdominal muscles from overweight, over-eating of starchy foods and lack of exercise.

4. Insufficient intake of bland fluid (water and fruit juices).

5. Constant taking of aperients, especially concentrated solutions of salts.

6. Inflammation of the bowel causing diminution of peristalsis (bowel movement) in order to prevent further injury to the mucous and muscular coats.

7. Lack of adequate stimulation to movement. This occurs when there is insufficient intake of wholemeal bread, fruit, vegetables and bulky foods.

8. General lack of nervous tone in the body, together with constant anxiety concerning evacuation, resulting in nervous spasm of the bowel.

What to do about Constipation

What can be done to avoid constipation and its bad effects? Here are seven sensible rules to follow:

1. Be patient: that is, day by day go to stool at the *same* time irrespective of whether there is a result (there always will be in the end) and do not try to hurry and force a motion while at stool. Also relax your mind, as worry inhibits bowel action.

2. Only take aperients under medical advice, and then only if all else fails.

3. Drink six to eight glasses of water daily, and avoid strong tea.

4. Eat a well-balanced bulky diet, leaving plenty of residue to stimulate action.

5. Take exercise helpful to the bowels—walking, swimming and horse-riding. Practise the “daily dozen” of bending and twisting abdominal exercises.

6. Be “bowel-conscious” at one regular daily time, and then forget that your bowels exist until the same time next day.

7. Refuse to depend upon artificial aids such as bowel-stimulating drugs, for you are merely crippling the bowel wall and adding to the trouble you desire to remedy.

CHAPTER V

EXERCISE EASILY

THE present age is placing such emphasis on physical exercise that there is a tendency for views and propaganda to become unbalanced, with correspondingly unfortunate results of harm rather than good.

Because of this, some people tend to become hostile to the advantages of correctly performed exercises. In this chapter it is intended to outline a sound programme for the carrying out of daily exercises and for exercises in general. But there is nothing extreme or "faddist" in the suggestions; they are designed for the sane use of normal everyday people.

Rules for Set Exercise

The commonsense rules that apply to exercising are these:

1. Aim for daily, regular exercises well within your limits of endurance. Sudden and strenuous exercising is dangerous and useless.

2. Feel that you are "enjoying" yourself—encourage rhythmical movement; avoid anything forced.

3. Never exercise when tired, or after a heavy meal, or after having rushed about or when convalescent from illness.

4. Regularity is essential if one is to remember easily, and become readily competent in healthy exercise.

5. Choose the time best suited to your own life, whether morning, afternoon or evening.

6. For full benefit after vigorous exercise, it is advisable to have a shower or wash down in cold or warm water followed by a brisk towelling.

7. Mental concentration should be practised during any form of exercise, particularly on the muscles being used, as this provides a useful form of discipline.

8. If breathlessness or other acute discomfort is felt after normal exercise, always seek medical advice before continuing.

9. Aim for suppleness of joint and elasticity of muscle.

It cannot be stressed too much (as already said in the previous chapter on "Posture") that exercises should not be a substitute for adopting a correct posture, but should merely be a means of making the muscles and joints more obedient to the mental commands to carry oneself correctly.

It will not be easy at first to bear this in mind, but, as S. A. Bevan says in *Exercise Without Exercises*, "every one who is not a cripple can do it, and when you do, you are treating yourself to a far more serious and far more effective course of exercise than if you went into contortions twenty times in each direction every morning, or spent six hours a week at a gymnasium or played thirty-six holes of golf. The converse is equally true. If you fail to hold and carry yourself properly you are counteracting, most of the time, the special vigorous exercises you give yourself some of the time."

We will now consider the various ways in which one may take pleasurable outdoor exercise not mainly of the gymnastic variety. Such pleasant relaxation may be in the guise of walking, horse-riding, swimming, ball games (tennis, cricket, football, netball, hockey, golf), mountain-climbing and cycling.

Walking. Walking is one of the best exercises, provided you walk correctly. It is inexpensive, is available to all, and brings most of the little-used muscles into play. It can be enjoyed in all weathers and does not require expensive equipment.

Some people do not derive good bodily results from walking because they do not know how to place their feet and hold their bodies, and especially because they walk from their knees and turn their feet outwards.

The right way to walk is with a firm hip movement backwards and forwards, with a simultaneous straightening out of the knee, the foot being turned up so that the body weight is conveyed from the heel to the sole. The foot then lightly presses against the ground in a springing movement so that similar impetus is given to the movement of the other leg and foot.

Correct walking stimulates the bowels into activity, encourages deep breathing, brings blood to feed the surface tissues of the body and gives a delightful feeling of well-being.

Horse-Riding. Riding a horse is now within the reach of many outdoor lovers as prices are not so exclusive as formerly. A riding outfit can be bought for a very few pounds.

The value of riding is two-fold: physical, because it stimulates breathing, massages the internal organs and brings seldom-used muscles into play; psychological because the ability to control the mind and moods of a horse gives a great access of confidence to the timid-natured person. There is, too, the additional benefit of leisurely movement in the fresh air with its resulting increase of healthy appetite. A brisk canter can give the thrill of excitement enjoyed by so many people, but in the

main the benefits of horse-riding are determined by its leisurely peacefulness.

Swimming stimulates the circulation, promotes deep breathing, strengthens the abdominal muscles and gives confidence. It is a uniformly healthy exercise provided one does not swim when fatigued or after a heavy meal, or when convalescent from illness. An important point to remember, especially in cool weather, is that it is seldom wise to stay in the water for very long.

Mountain-climbing has similar physical effects to those of swimming, but in addition stimulates the mental qualities of adventurousness, confidence, courage and thought for others.

It also provides the psychological stimulus of giving one a different perspective on life, for the attainment of a difficult climb makes one feel how little are the things in life which we normally allow to irritate us.

Ball games stimulate breathing and (if played within reason) assist the development of heart muscle, and tend to increase agility of movement. In addition they employ the mind so that one relaxes one's attention from the worries and problems of daily life.

Cycling. The exercise and sport of cycling has returned to popularity and there are few open-air pleasures more beneficial. It is, in the main, a leisurely mode of travel and gives one time to see the landscape. It keeps the leg muscles trim and slims the ankles, and causes the lungs to expand more fully. To obtain the greatest benefit from cycling certain precautions should be observed. The frame length should be correct so that over-stretching of the thigh- and leg-muscles is avoided. The handlebars should not be of the low racing type for young people and women, as this tends to interfere with functioning of the lungs and

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the pelvis organs. Always dismount before uphill riding: this causes throbbing and rapid beating of the heart.

In conclusion, never forget the value of musical rhythm in assisting exercise and increasing its value. The gramophone can be called in to play records for set gymnastic exercises, and the human voice in song makes the road seem short and effort easier as we take our pleasures in varying forms of exercise.

"Let us sing as we go" is a sound slogan and is the best preventive or remedy of depression known to lay people or doctors.

CHAPTER VI

WORK AND REST

ALL the circumstances of man's life point to the fact that he is intended to live *rhythmically*, and the faculty of working is no exception to this rule. Just as night follows day, as satiety replaces hunger, as sleep follows waking, so work must be followed by rest, and rest must be interrupted by work.

Work may be muscular (physical) or mental (intellectual), but in either case it cannot be steadily continued (especially if "concentrated" work) without causing weariness (fatigue). If still continued at this stage, fatigue will in turn produce imperfection in the continued work. Rest may be partial or complete—when complete we speak of it as sleep, which is relaxation of mind and body with the addition of unconsciousness, for a period decided by and varying with several component factors.

Work and Fatigue

Slight fatigue is a healthy result of work (whether physical or intellectual) and is a direct invitation to relax, and eventually to sleep. If, however, fatigue is allowed to develop excessively, then it is a hindrance to relaxation. Instead of summoning sleep and contentment, it drives them away, to be replaced by nervous irritability.

Fatigue is a defence mechanism set up by nature to arrest the activity, whether mental or physical, which is causing the wearied state; the individual is very unwise to continue making efforts in defiance of nature's "stop" signal.

Even if eventually we cease effort, and *do* manage to catch hold of sleep, we do not experience the restfulness and revitalisation which is the purpose and effect of normal sleep taken when needed and before *over*-needed.

The fact of undue effort resulting in fatigue was recognised even before Christ, since in the Book of Proverbs we read that "overmuch study is a weariness unto the flesh."

In modern times, industrial medicine has largely concerned itself with the effect upon output of monotony, routine, and overlong duration of work hours. The knowledge evolved has been utilised by many go-ahead firms to improve the work done, and keep their employees in a healthier state of body and nerves.

Symptoms of Fatigue

Fatigue is first felt as vague discomfort in effort and the need to cease what one is doing. If work is still continued actual pain is felt. This is the means by which nature attempts to limit muscular activity, since acute pain renders activity impossible however great the will to carry on.

The nervous system is then affected, as manifested by inattention, boredom, inability to concentrate, yawning, irritability of manner and word, and depression. Later on the power of decision and judgment becomes impaired, fear readily creeps in, and finally there may be hysterical manifestations or a retreat into illness, simulating organic disease.

Fatigue lowers resistance to illness, prolongs the recovery period, and encourages recurrent attacks of infections and disease.

Usual Causes of Fatigue

The usual causes of fatigue include the following:

1. Acute illness or repeated attacks of slight illness, *e.g.* "colds" cause fatigue to set in earlier than it would normally do.

2. Chronic illness such as tuberculosis, rheumatism, anæmia, nasal catarrh, eyestrain, constipation, incorrect posture and flat feet all have the same, but a slower effect, as acute illness. They cause fatigue to set in earlier and are also responsible for slower recovery from it.

3. Overstrain of the special senses from the constant stimuli of artificial light, noise and constantly *rushing* to work or pleasure.

4. Emotional strain, due to many varied causes, especially in family life, or to the excessive speed at which the day's work has to be done—one of the penalties of so-called civilisation and progress. In less industrial times, one lived nearer to the rhythm of nature, which ever forbids haste, jarring, and suddenness. Man lived more peacefully, rested when he was tired, and was unaffected by the industrial bogey, bidding him to hurry and hurry and hurry again. In nature, too, there is variety, in machine work there is monotony and lack of leisure to look around.

5. The rush, stress, lack of rhythm, and routine of modern life have created need for artificial, easily applied stimuli to drive on the jaded nerve cells and muscle fibres to fresh effort. These stimuli we know most commonly under the names of tea, coffee, alcohol and nicotine. The first three have been already discussed, so it but remains to mention tobacco. The unhealthy, even dangerous, effects of smoking on adolescent physique cannot be

overstressed. This is especially so in the case of young girls, for women's more sensitive nerve and heart cells are more quickly and more lastingly affected by nicotine. Far too many young people become habitual smokers, and the results are seen in sallow, dry skins, throat coughs, "rusty" voices, and irritability of heart and nerves. In such cases, nicotine acts as a "dope" to disguise fatigue, and the young individual continues on his dangerous way, unrecognised and unhealed.

Smoking has a narcotic effect. It is "something to do" and therefore a psychological prop against self-consciousness, and it has a rhythmic action which soothes the jaded, restless nervous system. It is also believed to stimulate certain glands (the adrenals) temporarily and thus appears to lessen fatigue.

That nicotine is a muscle poison has never been denied, and has indeed been proved, but that its controlled use is detrimental is also not true in most cases. Smoking is undoubtedly detrimental when excessive, when practised on an empty stomach or with lowered bodily resistance, or when it is a means by which a wearied body and an irritable mind are urged to still further effort.

Relaxation and Sleep

Fatigue can be averted by the taking of partial rest, often spoken of as relaxation, or by encouraging the onset of sleep, which is the most complete form of rest. Relaxation can be effected in either, or both, of two ways.

One may voluntarily, and without moving from one's place, relax one's attention, close the eyes, slacken the muscles, and remain thus for a moment or two. This habit is a valuable one to acquire, as it brings a slackening of tension which relieves strain on the heart and blood

vessels. It may be carried to a more complete stage by removing the garments and lying down on a bed or couch, covered only by something light in weight.

The other, and additional way, is to turn one's attention to an entirely fresh interest—perhaps muscular exercise when one has been using the brain, or to sit quietly reading when the body has been wearied by muscular effort. The great value of having numerous interests in life, hobbies or passing recreations, is that the wearied mind is averted from boredom by the attraction of fresh stimuli.

Sleep

The ability to sleep at need is the best defence a person can possess against fatigue. One of the dangers of neglecting the indications of fatigue is the loss of power for restful sleep.

Healthy, sound and speedy sleep is dependent upon several factors:

(a) Cultivating a need for sleep at a given time and keeping to the rhythm thus formed.

(b) Refusing to encourage the personal query "Shall I be able to sleep?" Empty the mind of any emotional stress, or uncertainty, and sleep will certainly follow.

(c) Avoiding stimuli (tea, coffee, nicotine, etc.) which one usually finds create wakefulness.

(d) Selecting the most comfortable position, ensuring that one is warm enough, and then deliberately relaxing body and mind.

CHAPTER VII

CULTIVATE A HEALTHY MENTAL OUTLOOK

A TRULY healthy body is altogether impossible without a healthy mind, for the influence of the mind upon body processes is so great that a negative, depressed, unhappy attitude of the imagination produces a corresponding damping down of the bodily mechanism.

Conversely, a positive, contented, philosophical outlook which aims for happiness along sound lines stimulates the circulatory, respiratory, nutritive and eliminative functions, so that the body becomes conscious of possessing sound health.

One of the best features in modern thought is the realisation of how much sound mental health matters, apart altogether from *disease* of the brain. We know now that many illnesses are really pictures erected by the mind to help it to hide from reality and the facing of obstacles, or the making of decisions.

We know, too, that the mind is so impressionable from the very beginning of life as to retain every stimulus or thought presented to it, and that when these stimuli or thoughts are unpleasant in nature, the mind pushes them away into its depths. But instead of being finished with, they are ready to come up on all kinds of occasions and interfere with normal happy living, and only become harmless when the individual voluntarily faces these impressions and then consigns them to true oblivion.

If not dealt with, these hidden fears and buried

emotions produce illness spoken of as psychoneurosis, neurasthenia, anxiety-neurosis, obsessional neurosis and nervous breakdown. In the slighter degrees they produce what we call "maladjustment," when the individual does not fit into his environment or work, does not make happy social contacts, suffers from self-pity and imagines himself to be worth much less in every way than other people (inferiority complex).

When such states occur in children and young people they are of serious import, far more so than physical illness, for if not dealt with they produce disordered mental vision and the sufferer attempts to protect himself by an assumed defence of illness, or an over-compensation by developing undesirable traits.

In these cases all situations affecting the individual become exaggerated or distorted; he interprets certain experiences incorrectly, and endeavours to solve the resulting problems along similar incorrect lines, so that the end result is dissatisfaction with himself, and discontent with others.

Such a one feels himself a failure and because his mental outlook is incorrect becomes unable to take the necessary steps to overcome his problems and so drifts into chronic invalidism as his defence against facing up to personal discomforts and important responsibilities.

It used to be believed that such cases could cure themselves without any help and that the only thing for relatives, and for the doctor, was to adopt a hearty "pull yourself together" attitude. This is precisely what these cases *cannot* do without skilled help.

To them, their symptoms are very real, and until they understand that they are allowing their imagination to create ill-health as an excuse, so long will they hide behind

the wall thus erected, and if scorned by others, will but feel themselves justified in their inferiority sense.

Success in dealing with and overcoming nervous states implies the fundamental recognition of the fact that nervousness, nervous failure, neurasthenia, neurosis or inferiority complex—all terms for similar forms of mental maladjustment—is as much a state of ill health as any obvious *physical* illness.

Just as constipation, rheumatism, diabetes, tuberculosis and all other organic conditions *must* be handled on the lines of prevention and cure, which may necessitate treatment in hospital for observation and the employment of modern therapeutic methods, so, in the same way, must nervous illness be handled. It is an illness, but instead of, or as well as, actual disorder of the tissues, there is disordered handling of the imagination, the will and the emotions.

Where there is good mental balance, it is the *will* of the individual which directs and restrains the imagination and the emotions. The will is the one to say "Stop—Caution—Go." But in the nervously maladjusted it is the imagination and the emotions which set the pace and often hold practically uncontrolled sway.

No effort should be too great for the sufferer, his relatives or his physician to heal nervous conditions of ill health, since they produce such psychological disaster in the individual and so much friction in his home circle. That it is an effort to lead a thoroughly happy and satisfying life no one would deny, but it is one of the fundamentals of happiness that "effort brings its own reward," the reward being largely the sense of something accomplished by one's own will and judgment.

Moreover, the building up of character and personality

is largely dependent upon the ability to overcome obstacles and to face difficulties, and hence if we hope to possess a strong personality we must not allow ourselves to run away too readily from obstacles in our pathway through life.

The cultivation of good mental hygiene and of a correct attitude towards life and all that it means is dependent upon our realisation and practice of certain essentials, and these we will now briefly consider.

Basic Principles of Correct Mental Hygiene

1. *Have a Sound Philosophy of Life* If you believe that all life has its purpose, and that obstacles, pain, suffering, frustration and so forth have their place in the scheme of things, then you will not allow the troubles of life to become personally devastating, but will face them with interior serenity and external poise and gradually seek to overcome them or, alternatively, accept the inevitable in their regard.

To believe otherwise is to have lost one's anchor and to have missed the explanation of the many puzzles and problems of life.

As a corollary to this is the necessity to aim for contentment, not only to look for personal satisfaction, but to make the best of a difficult situation, take the best that life offers, submit smilingly to do without the rest, and be happy and contented with what one *has* been permitted to have.

To be always crying out for one hundred per cent of everything is the first step to losing the good things one *has* got, and means sinking oneself in the dismal morass of self-pity.

2. *Plan Your Life inside the Limit of Your Handicaps.* It is

foolish to set a goal so entirely beyond your own abilities that you waste time complaining that *you* can never do anything. Recognise that you have certain limitations in common with all of us. But having admitted so much, having faced reality, count up also your assets, your good qualities, your potentialities and build up your activities on these.

You will probably find with surprise that you possess greater powers than you gave yourself credit for, and gradually find others that you were not aware of. ~~Never~~ excuse yourself on the ground of inferiority, for that is the first step towards creating imaginary symptoms of ill health as an excuse for your limitations in relation to your neighbour.

3. *Control Your Emotional Needs.* Learn early in life to be the master of your emotions, especially your sexual emotions, by remembering that these are not in us as an end in themselves to be gratified at all costs, but are intended to be used as a response to controlled intellectual stimuli.

Refuse to be constantly thinking in terms of emotion—call it when you want it and in due time and place, and otherwise pay little attention to any of your emotions, whether of fear, anger, power, greed, jealousy or sex. Try to dissociate yourself from your emotion and judge it in its true perspective.

✓ 4. *Cultivate a Community Sense.* The mental contentment of man depends mainly on his subordination of himself to others, the forgetting of his own interests, needs, pains, fears, in the consideration of the same problems in others. This is because he thereby makes happy contacts and friends, creates a congenial atmosphere, and is welcome whenever he appears. Let your aim be to "put out" not

to "take out." Don't think of your acquaintances in terms of what you can get out of them for yourself, but in those of giving to them, for *themselves*.

It was Lord Chesterfield who wrote that "If you wish particularly to gain the good graces and the affection of certain people, men or women, try to discover their most striking merit, if they have one, and their dominant weakness, for every one has his own, then do justice to the one, and a little more than justice to the other." This is wise, and a safe rule to follow.

Learn to co-operate with others, value their opinion, keep their confidences. If you see them in need of help then give a helping hand. Society (using the term in its widest sense) has many needs. Learn to recognise these, offer to help in any way possible however slight that way may be, and do not look for applause or honour for your efforts. Give of your best irrespective of public notice and you will find that reward comes quietly and surely in the power that is yours to adjust to yourself, to your neighbours, and to environment.

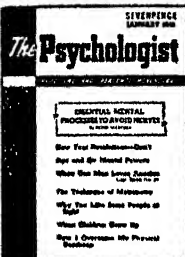
If you are sincere, honest, loyal, generous and unselfish you are on the high road to mental health and certain of a contented existence, for the secret of happiness is the forgetfulness of oneself.

If, in addition, you have a firm belief in the Providence of God, and endeavour always to practise the tenets of Christianity, then you need never fear to develop a neurosis, and you will get the most out of life for yourself and give the utmost to others.

Do You Want to Keep Well? Yes?

Then follow these simple rules

1. Control your body muscles, use them within the limits of fatigue, and both for work and for play.
2. Control your intake so that you avoid excess of impure air, of food, alcohol, tobacco and sex.
3. Control your imagination and emotions so that *you* are the master, *they* the servants.
4. Cultivate an interested mind, so that you always have interests within yourself, and are not dependent upon other people for your leisure hours.
5. Cultivate a social conscience so that you recognise the needs of your neighbour and are anxious to do something about his necessities.
6. Cultivate a spirit of gratitude to God for the good things He has provided and show your thanks by keeping the Laws He has laid down.



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